Product instruction manual
Magnum® MFM-FS Folding System
Fixed Speed

MAGNUM®

Magnum Folders have been designed to be user friendly, however we strongly recommend you take a few minutes to read through this manual to ensure correct operation.

Keep this manual safe for future reference.

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Specifications

Paper Size	125 x 176mm (B6) to 297 x 420mm (A3)/5 x 7" to 11 x 17"
Paper Weight	up to 220gsm single folding, up to 135gsm multiple folding
Paper Quality	Woody paper, high-quality paper, high-quality paper for stencil printing, medium-quality paper
Fold Type	Single, Double parallel, Letter, Gate, Zig-Zag, Fold-out
Paper Feed System	Friction roller feed system
Max. Stacking Capacity	500 sheets
Folding Speed	50-200 sheets per minute
Operating Method	Digital key input
Power Supply Required	13 Amps
Power Supply	220/240 V / 110-120 V
Rate Input Power	50W
Frequency (Hz)	50-60Hz
Dimensions	610 x 580 x 450mm
Gross Weight	29Kg

Introduction

Thank you for purchasing the Magnum MFM-FS Folding System.

This system enables users to achieve greater efficiency in clerical work by releasing them from paper-folding work that has manually been performed in the past.

Please read these instructions carefully before starting to use the system to ensure you get the best results and are competent at operation.

Should you experience any problems please contact your supplier.

Safety Instructions

- Make sure that the system is electrically grounded. This prevents an electric shock when there is a leak of electricity.
- Use the system at 110 – 120 VAC, 220 – 240 VAC with a frequency of 50Hz to 60Hz. A fire may start or the system may break down if a higher or lower voltage is used, or if an electric current with a frequency that is not within the range of frequency stated above.
- Do not place any objects on this system. A fire may start or electricity may leak if water or a foreign object enters the system.
- Handle the power cord with care. A fire may start or an electric shock may be caused if the cord is damaged, broken, or processed, if a heavy object is placed on the cord, or if the cord is bent forcibly.
- Do not pull the power plug out of or put it in the electric outlet using a wet hand.
  Otherwise, an electric shock may be caused.
- Do not remove the cover of this system. Otherwise, an electric shock or injury may be caused.
- Do not remodel this system. Otherwise, a fire may break out or an electric shock may be caused.
- If the system is used when it is in an abnormal condition, such as generating heat, emitting smoke, and giving out a strange smell, a fire may break out or an electric shock may be caused. Turn off the power switch immediately and then pull the power plug out of the electric outlet. Afterwards, report the fault to your supplier.
- If abnormalities such as the power cord generating heat and giving out a strange smell are found, turn off the power switch immediately and then pull the power plug out of the electric outlet. Afterwards, report the fault to your supplier.
- If a foreign object enters the system, turn off the power switch first and then pull the power plug out of the electric outlet. Afterwards, report the fault to your supplier.
- If thunder approaches, pull the power cord out of the electric outlet to prevent a fire or breakdown caused by the falling of a thunderbolt.
- Do not let hairs, a necktie or necklace hang above the drive of the system.
  Doing so may cause an injury.
- Do not put the system on an unstable place such as a shaky stand or a slanted floor. Doing so may cause the system to drop or fall down, causing an injury.
- Do not put the system in a moist or dusty place. Doing so may start a fire or cause an electric shock.
- Be sure to pull out the power cord while holding the plug. If the power plug is pulled out while holding the cord, a fire may break out or an electric shock may be caused.
- Be sure to pull the power plug out of the electric outlet first when moving this system.
  Otherwise, the cord may be damaged, causing a fire or an electric shock.
- Be sure to pull the power plug out of the electric outlet for safety purposes when this system is not used for consecutive holidays or for other reasons.

Information Before Use

1. Precautions on Installation

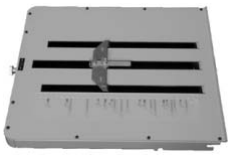
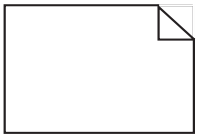
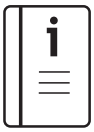
Do not install it in an unstable place such as on a faltering bench or an inclined place.
It may fall down or drop and cause an injury.

Do not install it in a dusty place or a place of high humidity.
It may cause a fire, or an electric shock.

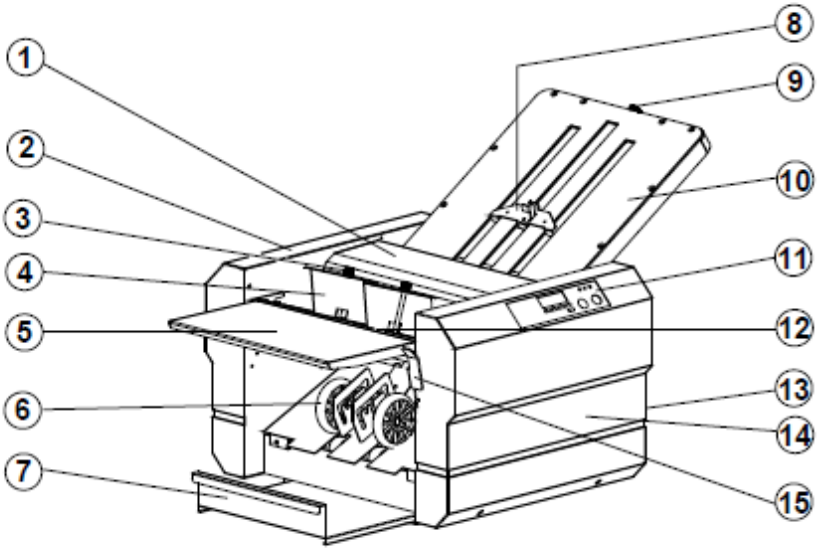
Do not install it in a place exposed to direct sunlight.
Avoid a location near a window.
It should be used at an ambient temperature of 5 to 35°C.
Do not install it in a location close to heating equipment.
Do not install it in a place exposed to a direct wind.

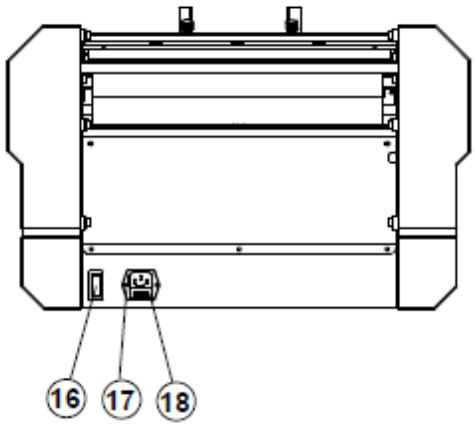
2. Checking Accessories

Check accessories immediately after unpacking. Should an item be missing, contact your supplier.
Also, check if the warranty has the dealer's signature and the date of purchase is mentioned.

Accessory	Quantity	
Table 1	1	
Table 2	1	
Power Cable	1	
System cover	1	
Instruction Manual	1	

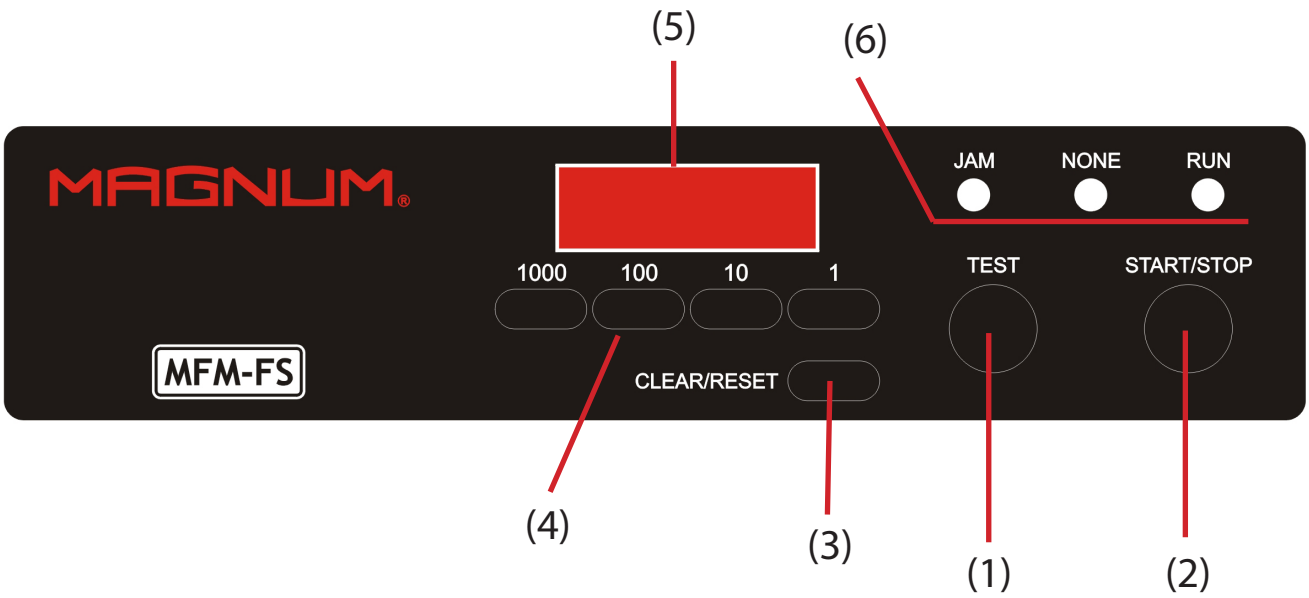
Parts





Number	Name	Number	Name
(1)	Roller cover	(10)	Table 1
(2)	Left hand side cover	(11)	Control panel
(3)	Paper feed roller	(12)	Paper feed table
(4)	Paper guide	(13)	Table 2
(5)	Feed table	(14)	Right hand side cover
(6)	Paper ejection roller	(15)	Paper feed table lever
(7)	Paper stacking table	(16)	Power switch
(8)	Stopper plate	(17)	Power cable socket
(9)	Fold position micro adjustment	(18)	Circuit breaker

Operation Panel and Functions



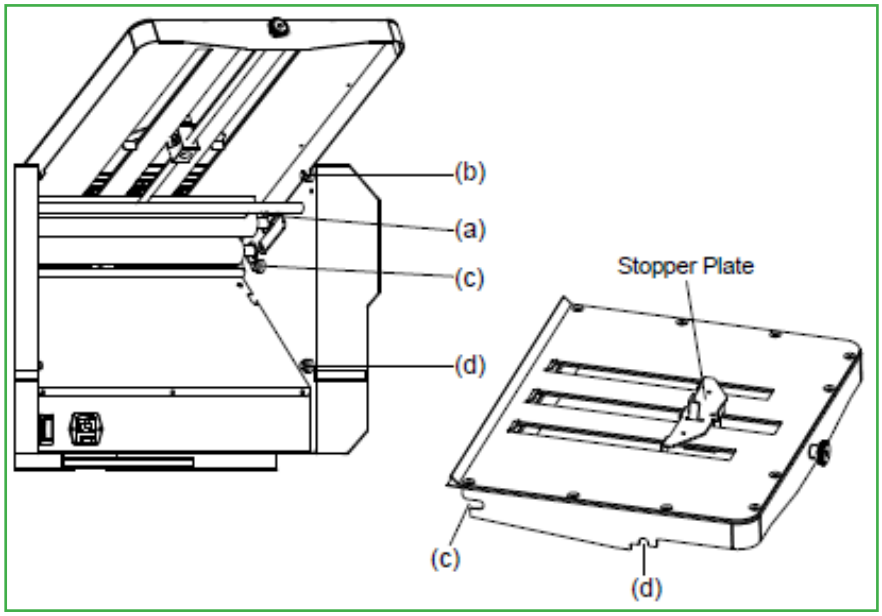
No.	Designation/Indication	Function
(1)	Test key	Test folds two sheets without counting.
(2)	Start/Stop key	Starts and stops the system.
(3)	Clear/Reset key	Clears counter indication resets error.
(4)	Numerical key	Inputs the desired number of sheets to be folded.
(5)	Counter	Shows the number of sheets.
(6)	Check lamp	Lights when paper stock runs short, or indicates the location where paper feed jam occurs.

1. Preparation

(1) Setting table 1 and 2

Fit (a) and (b) of table 1 and (c) and (d) of table 2 on the studs (a), (b), (c) and (d) at the left and right sides of the side plate.

When setting Table 1, be sure to put the stopper plate in the centre. If table 1 and 2 are not properly set, the system may not be able to fold paper correctly.



CAUTION

Ensure that both Table 1 and 2 aren't warped and properly fitted on the studs (a) (b) (c) and (d). If they are improperly set, it may cause incorrect folding or injury.

(2) Setting paper

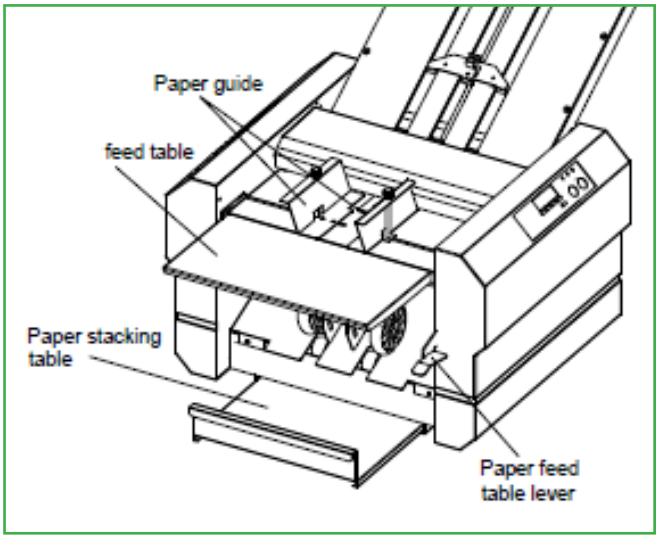
Pull the paper stacking table out and set it while lifting the feed table.

Raise the paper feed table lever.

Set the paper guide at the required size of paper stock being used.

Place the paper on the feed table with its printed side facing up.

Ensure that the paper is loaded neatly and with its leading edge flush with the front plate of the feed tray.



Place the paper printed side down in case of fold-out.

Place the paper on the feed table so that it touches the paper guide and then tighten the paper guide setscrews.

Lower the paper feed table lever and set the paper.

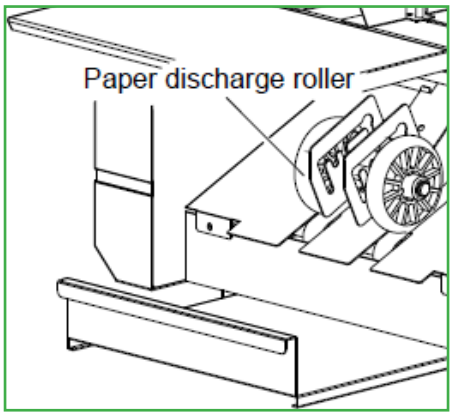
If the paper does not come in contact with the paper feed roller, it may be fed incorrectly. In such case, the leading edge of the paper may touch the guide plate in the front and prevent the paper from being fed. Reset it by pulling it backwards.

If the paper is curled or wrinkled it might cause the sheets to misfeed. Correct it before use.

In the case of printed paper, use it only after the ink is dry, otherwise the paper feed rubber roller, paper separator, fold roller and other parts of the unit will be stained with ink and may get ink on subsequent sheets.

Do not use ruled paper as the paper folding may deteriorate.

(3) Setting paper ejection roller



Set the paper ejection roller at the indication for the size of paper stock used. If the roller is set at a wrong position, it may cause problems with stacking of folded sheets.

The paper folding length may be altered depending on the fold type and paper curl may be caused by changes of temperature and humidity. Therefore, whenever a paperjam occurs at the stage of ejection, reset to adjust the paper eject roller to the best position.

(4) Setting paper stacking table

Pull out the paper stacking table and set it so that the ejected sheets flows out smoothly.

2. Operation Procedure

(1) Switch the power on.

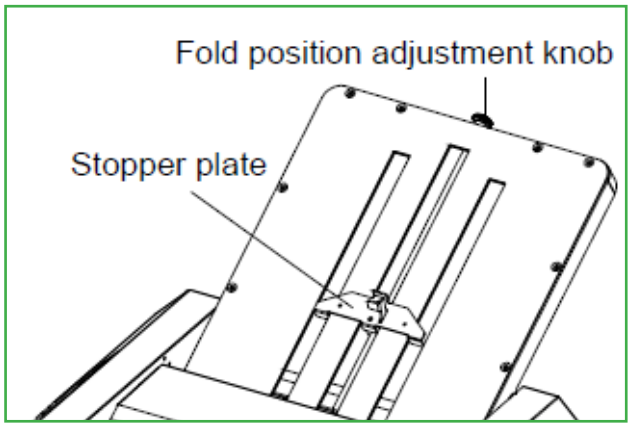
Insert the plug into the power socket and switch the power on. Be sure to remove the power plug from the socket after use.

(2) Setting Paper Fold Position

Pull the fold adjustment lever to move the stopper plate to the desired position on Table 1 and 2, matching the stopper plate mark (?) with the position and leave the half-nut lever there. The stopper plate automatically locks at the position where the half-nut lever remains.
* Incase of single fold only, all size paper should be set at the position of 'All Sizes' . Should wrinkles or irregular folding occur in single fold, move the stopper plate until halting by the stopper adjustment knob.

(3) Test Folding

Press the test key to feed 2 sheets of paper. Check if the paper has been folded correctly by examining the second of the 2 folded sheets.
* When the fold position is not correct, refer to 'Adjusting Paper Fold Position'.



CAUTION

Never put your hand in any driving part such as a roller. Keep ties, necklaces, hair etc away from the system as this can cause injury.

(4) Adjusting Paper Fold Position

When the fold position is incorrect, refer to the following chart.

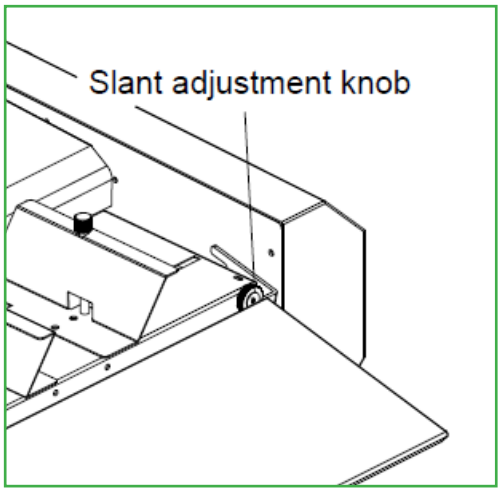
	FOLD TYPE	SINGLE	GATE	LETTER	ZIGZAG	DOUBLE	PARALLEL FOLD-OUT
Table 1	If the fold appears this way (length of folding)	None	(1/4L)	(1/3L)	(2/3L)	(1/2L)	(1/4L)
	Side (A) is longer.		Shorten length	Shorten length	Shorten length	Shorten length	Shorten length
	Side (A) is shorter.		Extend length	Extend length	Extend length	Extend length	Extend length
Table 2	If the fold appears this way (length of folding)	(1/2L)	(1/2L)	(1/3L)	(1/3L)	(1/4L)	(1/4L)
	Side (A) is longer.	Shorten length	Shorten length	Shorten length	Shorten length	Shorten length	Shorten length
	Side (A) is shorter.	Extend length	Extend length	Extend length	Extend length	Extend length	Extend length

* The illustration represents the folded paper seen from the operator. ( ) shows the length of folding and L stands for paper length.

(5) Square Fold Adjustment

Turn the adjustment wheel to the right if the lower side of the folded paper slants to the right. Turn the wheel to the left of the lower side slants to the left.

* In other cases than single fold, place the folded paper with its face down on Table 1 and make the adjustment.



(6) To Start Folding

Press the Start/Stop key. The system starts to fold the sheets continuously.
Press the Start/Stop again while the system is in operation, to stop.
* The counter continues to add up the number of sheets folded.
If the desired number of sheets only is to be fed, set that number by pressing 1000, 100, 10 keys.
Then the reduction mode lamp will be on.
Under the following conditions, the system will automatically stop feeding;

- When the start/stop key is pressed while there is no stock
- When the start/stop key is pressed while the paper feed lever is at the lower position.
- When the stock runs out
- When paper feed slip occurs
- When paper jam occurs at Table 1 and Table 2
- When paper stack table is full
- When a paper jam occurs at the paper ejecting unit

Press the clear/reset key to reset after the error is corrected.

(7) To Stop Paper Feed

Press the stop key to halt paper feed while the system is in operation.

(8) Correction of Paper Jam

Should paper jams occur, switch the power off immediately and remove the jammed sheets.
When the jammed paper is stuck around the folder roller or other parts, it can easily be removed by detaching Table 1 and 2 from the unit. When the roller cover is opened, the system will stop the operation in an instant.

3. Maintenance

(1) Before cleaning the system, be sure to switch the power off and pull the power plug from the outlet.

(2) When the unit is not in use, put its cover in place to prevent dust, paper dust etc accumulating on the paper fold rollers.

(3) If paper dust or ink etc have accumulated on the paper fold rollers, it may cause wrinkles or improper feeding. To prevent this clean them periodically as follows;

- Remove Table 1 and 2
- Clean the surface of the fold rollers using the cleaning kit to remove stains or dust

(4) If paper dust or ink etc are accumulated on the paper feed rubber roller and the paper separator the paper feed performance deteriorates and the system becomes liable to paper jams or slipping. To prevent this, clean them periodically as follows

- Clean the surface of the paper feed rubber fold rollers using the cleaning kit to remove stains or dust
- Move the paper feed shaft towards you in the order as shown in the figure then clean the paper feed shaft

(5) Consumable products

- Paper feed rubber roller, rubber brake, paper feed separator used for the unit are consumable products
- Fold rollers are guaranteed for 6 months

4. Troubleshooting

Trouble	Possible Cause	Solution
The paper is not feeding correctly	Paper stuck just after its printed	Loosen the paper sufficiently or feed the paper after its dry
	Stains on the paper separator	Clean the paper feed separator using the unit cleaner
	Stains on the paper feed rubber roller	Clean the paper chips or ink on the paper feed roller with the unit cleaner
	The paper separator is worn out	Replace the paper separator with a new one
	The volume of paper loaded on the paper feed table is not enough	If the volume on the paper feed table is not enough, it does not feed since the paper detection lever is installed. Load 20 sheets or more.
The system does not operate even after the start/stop key is pressed	Paper jam inside the unit	Detach table 1 and 2 and remove the paper in the unit
Paper creasing	Paper stuck just after its printed	Loosen the paper sufficiently or feed the paper after it is dry
	Stains on the paper separator	Clean the paper separator using the unit cleaner
	Stains on the paper feed roller	Clean the paper chips or ink on the paper feed roller with the unit cleaner
	Stains on four paper fold rollers	Clean the stain on four fold rollers using the unit cleaner
	Table 1 and 2 are not properly set	Reset properly
	Paper jam in table 1 and 2	Detach table 1 and 2 and remove the jammed paper
Improper fold position	The total length of the paper is not standard size	Measure the total length of the paper and adjust using the fine adjustment knob
Drawing paper (125gsm or lighter) cannot be folded	The surface of four fold rollers are stained with paper chips or ink (slippery situation)	Clean away the stain on four fold rollers using the unit cleaner
	Low room temperature	The paper gets stiff and hard to fold at the low room temperature in winter. Perform folding after leaving the paper as it is for 3 to 4 hours at the temperature of 20-25°C

Warranty & Incorrect Use

IMPORTANT INFORMATION

Your Magnum Folding Machine should reach you in perfect condition, however please retain all of the original packaging once you have unpacked your Folding Machine in case you need to return it for repair. If your machine arrives damaged or faulty in anyway, this must be reported to your supplier immediately. If the Folding machine is sent back for repair under warranty and is damaged in transit due to faulty packaging your warranty may be void.
The Folding Machine you have purchased includes a 1 year warranty on defective parts and general wear and tear. It does not cover any jams or misfeeds caused by operator error and you could be liable for the repair costs (including delivery charges) if damage is caused by operator error.

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